#### Appendix A

#### PROJECT RESOURCE MAPS

#### 1 INTRODUCTION

- 2 The resource maps in this appendix present a profile of the existing setting of the 220-mile project area. These maps
- 3 are intended to provide the reader with the geographic references for the material presented in Affected Environment
- 4 and Impact sections of the DEIS.
- 5 The information in the resource maps is based on a variety of project documents, agency references, other mapping
- 6 sources, and field surveys. The source for each particular layer is noted below.
- 7 Because of the 1:100,000 scale of the resource maps, the locations of project features and existing resources should
- 8 be considered approximate and should not be used for quantification. A ruler enclosed with the resource maps provides
- 9 a guide to the abbreviations used and a mileage ruler.

## 10 TOPOGRAPHIC BASE

- 11 The topographic base for the project resource maps are the 1:100,000 scale USGS 30 X 60 minute quadrangle sheets
- 12 for the project area as follows: Oscura Mtns, New Mexico (1982); Davis Dam, Arizona Nevada California (1982);
- 13 Ivanpah, Nevada California (1985); Soda Mountains, California (1993); Newberry Springs, California (1977,
- 14 photoinspected 1989); Victorville, California (1982); Cuddeback Lake, California (1976, photoinspected 1989); and
- 15 Tehachapi, California (1978, photo-inspected 1990).

## 16 PROJECT FEATURES

#### 17 Coaxial Cable Route, Repeater Huts, Manholes, and Marker Posts

- 18 The coaxial cable route within the project area is based on the route shown on the most recent AT&T`as-built' 1:24,000
- scale maps of the P140 coaxial system (*Plans for Construction, Placing Access Vaults for L3 to Digital P140 Conversion,*
- 20 Socorro to Quemado, New Mexico; Colorado River to Baker California; and Baker, California to Mojave, Calif,
- 21 Phase IIA, Final Issue, January, 1990). The locations of permanent structures such as repeater huts, manholes and
- 22 marker posts were also taken from this source. The approximate location of each repeater hut and manhole is indicated
- on the resource maps. Due to the scale, only every tenth marker post is shown.

## 24 **Project Mileage**

- 25 Five-mile increments are shown on the resource maps. The total project mileage is approximately 220 miles with
- a New Mexico segment of 7.7 miles, a California segment of 205.1 miles and a Nevada segment of 7.4 miles. The
- 27 distance between marker posts was determined based on measurements of the project route conducted by David Evans
- 28 & Associates (DEA) in June of 1996 (P140 Marker Post Inventory, DEA, 7/17/96). These distances were then converted
- 29 to a mileage scheme for use in the DEIS. All project features are identified based on their source map and approximate
- 30 locations down to a tenth of a mile. Precision of the placement of project features depends on the scale of the individual
- 31 source maps.

# 32 Parallel Fiber Optic Segments

- The resource maps show those sections where the P140 coaxial cable is parallel to another AT&T fiber optic cable.
- These segments are based on those portions identified by DEA in the marker post field measurements (DEA, 1996).
- None of these segments are proposed for removal in any of the action alternatives to avoid potential service disruption.

## 1 RESOURCE LAYERS

- 2 The information on the resource maps has been organized into separate layers of data tied to the subject areas discussed
- 3 in the main text. Resource layers include the following: land management districts, land ownership, special designated
- 4 areas, sensitive species/habitats, general vegetative communities, water resources, road and utility crossings, and
- 5 the access corridor.

# 6 Management District

- 7 Management districts were identified based on the following documents: Socorro Resource Management Plan, BLM
- 8 Socorro Resource Area, New Mexico, August, 1989; Supplement to the Draft Stateline Resource Management Plan
- 9 and Environmental Impact Statement, BLM Las Vegas District, May, 1994; The California Desert Protection Act
- of 1994 (Public Law 103-422), 16 USC 410aaa, October 31, 1994 and legislative maps; and the California Desert
- 11 Conservation Area Plan (BLM, 1980) and subsequent amendments (BLM, 1981 -1990). Management districts were
- 12 also cross-checked with land ownership information developed by Land Services, Inc. (LSI) which was incorporated
- in the marker post survey report (DEA, 1996).

# 14 Land Ownership

- 15 Land ownership is based on the real estate information developed by LSI which was incorporated in the marker post
- survey report (DEA, 1996). Ownership is profiled on a marker post basis rather than on legal descriptions; therefore,
- there may be discrepancies between the actual areas of ownership and those shown on the resource maps.

# 18 Special Designated Areas

- 19 Special designated areas along the project route include BLM Areas of Critical Environmental Concern (ACECs),
- 20 BLM Special Management Areas (SMAs), Wilderness Areas, Wilderness Study Areas, National Natural Landmarks,
- 21 and National Historic Trails. Sources include: Socorro Resource Management Plan, BLM Socorro Resource Area,
- 22 New Mexico, August, 1989; Supplement to the Draft Stateline Resource Management Plan and Environmental Impact
- 23 Statement, BLM Las Vegas District, May, 1994; The California Desert Protection Act of 1994 (Public Law 103-422),
- 24 16 USC 410aaa, October 31, 1994 and legislative maps; California Desert Conservation Area Plan (BLM 1980,
- 25 1981..1988); BLM New Wilderness Areas, National Parks and Preserves (BLM, June 1995); Draft State of California
- 26 Wilderness Status Map (with PL-103-433, California Desert Protection Act of 1994), BLM, January 1995; Desert
- 27 Access Guides (Needles, New York Mountains, Irwin, Johnson Valley; Stoddard Valley; Red Mountain; and Jawbone/Dove
- 28 Spring), BLM, May 1988. Wilderness boundaries were updated with information from markup maps being prepared
- 29 by Dennis Schramm at Mojave National Preserve. The location of these areas is approximate only and has not been
- 30 field surveyed. Areas directly adjacent to the project route in addition to those areas crossed by project route have
- 31 been identified on the resource layer.

# 32 Sensitive Species/Habitats

- 33 Several different layers of information area presented concerning sensitive species and habitats.
- 34 The **tortoise activity layer** shows those areas identified with visible evidence or other indication of desert tortoise
- activity during the biological surveys conducted by E & E in April, 1996 (E & E, 1996). This layer only indicates
- 36 those areas with observed activity at the time of the field survey.
- 37 The desert tortoise habitat categories layer identifies those habitat areas identified in the 1989/1990 California
- 38 Desert Conservation Area Plan Amendments, Decision Record, BLM, June 1993. Amendment 19 in the 1989/1990
- 39 revision of the CDCA Plan established desert tortoise management categories on public land within the CDCA. This
- 40 delineation was mandated by an earlier plan (Desert Tortoise Habitat Management on the Public Land: A Rangewide

- 1 Plan, BLM, 1988). Although categories are only applicable to public land, this resource layer is not differentiated
- 2 between public and private land. The habitat category layer was created based on a 1:100,000 ArcInfo GIS file overlay
- 3 provided by the BLM. The Affected Environment section has a figure that shows BLM-category habitat in the vicinity
- 4 of the project in the CDCA.
- 5 The **desert tortoise critical habitat layer** identifies those areas designated in 1994 by the U.S. Fish and Wildlife
- 6 Service (USFWS) as critical habitat for the desert tortoise. The source of the this layer is the legal description of
- 7 critical habitat units in the USFWS recovery plan for the tortoise (Desert Tortoise Recovery Plan (Mojave Population)
- 8 (Desert Tortoise Recovery Team, Regions 1,2, and 6 USFWS, June 1994). The Affected Environment section contains
- 9 a figure that shows the critical habitat areas in the Mojave National Preserve and Nevada.
- 10 The sensitive species layer includes those areas identified with sensitive plant or animal species or indications of
- 11 potential presence of sensitive species observed during field surveys conducted by E & E and its subcontractor, Mark
- 12 Bagley Associates, in April of 1996 and additional surveys conducted by Mark Bagley in the spring of 1997(E &
- 13 E 1996; Bagley 1996, 1997). These species include sensitive animal species such as the Swainson's Hawk (Buteo
- swainsoni) and sensitive plants such as the Mojave indigo bush (Psorothamnus arborescens var. arborescens). Areas
- 15 of desert tortoise activity are identified separately as noted above. Since the sensitive species layer is based on only
- 16 two field surveys, it is not intended to indicate where sensitive species may actually be present or absent at some
- 17 future date.

# 18 General Vegetative Communities

- 19 Vegetation layers are based on field surveys conducted by E & E's subcontractor, Mark Bagley, Associates, during
- 20 April, 1996 (Bagley, 1996). The woodland community layer profiles those portions of the cable route where the
- 21 general vegetative community contains noticeable woodland association such as Joshua Tree Woodlands and Utah
- 22 Juniper. The **understory community layer** profiles the general vegetative association found around the cable route,
- such as Mojave creosote bush scrub and desert saltbush scrub. The vegetation found in the cable right of way is
- 24 often different than the general vegetative community identified in the project resource maps due to disturbance resultant
- 25 from original cable installation and maintenance to date.

#### 26 Water Resources

- 27 This layer identifies the desert washes crossed by the project. There are no perennial water bodies crossed by the
- 28 project. The coaxial cable route does cross the Colorado River and an associated wetland, but these areas are outside
- 29 removal areas. The washes for the project area were identified from those indicated on the P140 `as-built' maps (see
- 30 reference above) and those indicated on the USGS 7.5 minute topographic quad sheets for the project area and verified
- 31 by Land Services, Inc.

# 32 Road and Utility Crossings

- 33 This layer identifies roads and utilities crossed by the project route. The road crossing layer identified only those
- 34 roads that are recognized by county and state agencies. The Mojave Desert contains numerous jeep trails, private
- 35 roads, and other trails that are not recognized by transportation agencies and these are not indicated on the project
- 36 resource maps. The **utility crossing layer** identified the aboveground and belowground utilities identified as crossed
- 37 or directly adjacent to the project route. Both roads and utilities were identified through review of the P140 `as-built'
- 38 maps (see reference above), USGS 7.5' topographic quads (see below), and consultation with transportation agencies
- 39 in New Mexico, Nevada, and California. Utilities were not based on contacts with local utilities or utility locates
- 40 in the field, and thus this layer should be considered preliminary.

## APPENDIX A

## 1 Access Corridor

- A dirt/gravel access corridor parallels the cable right of way across its length in California and Nevada. Several different layers of information are presented concerning this corridor. The **parallel road layer** identifies those areas where another public road parallel to the access corridor (i.e., within 0.5 mile) also provides access to the general area around the cable route. The **access corridor layer** identifies the location of the corridor relative to the cable route, whether north (N) or south (S). The **divergence layer** identifies those areas where the access corridor diverges more than 50 feet from the cable route. These areas are identified with a notation as to the distance (e.g. 65 75') and direction (N/S) of the divergence. Because the access corridor is, for the most part, within 50 feet of the cable route, it was
- 9 not possible to map the corridor separately. Information about the access corridor was developed based on field surveys
- 10 conducted by DEA in June 1996 (DEA 1996), P140 `as-built' maps, and USGS 7.5' topographic quads for the project
- 11 area.

# 1 TOPOGRAPHIC QUAD MAPS

- 2 The following USGS 7.5' 1:24,000 topographic quad maps were used to develop some of the resource layers presented
- 3 on the project resource maps.
- 4 Map
- 5 **NEW MEXICO**
- 6 Luis Lopez 1982
- 7 Socorro 1959, Photorevised 1979
- 8 CALIFORNIA/NEVADA
- 9 Mt. Manchester, CA-NV-AZ 1970, Photorevised 1983
- 10 East of Homer Mtn, CA-NV Prov. 1984

## 11 CALIFORNIA

12	Homer Mtn.	Prov. 1984
13	Signal Hill	Prov. 1984
14	East of Grotto Hills	Prov. 1984
15	Grotto Hills	Prov. 1984
16	Pinto Valley	Prov. 1983
17	Mid Hills	Prov. 1983
18	Cima	Prov. 1983
19	Marl Mountains	Prov. 1983
20	Indian Spring	Prov. 1983
21	Seventeen Mile Point	Prov. 1983
22	Soda Lake North	Prov. 1983
23	West of Soda Lake	Prov. 1983
24	Crucero Hill	Prov. 1983
25	Cave Mountain	Prov. 1986
26	Dunn	Prov. 1986
27	Alvord Mountains East	Prov. 1986

- 28 Manix Prov. 1982, minor rev. 1993
- 29 Harvard Hill Prov. 1982
- 30
   Yermo
   1953, Photorevised 1970

   31
   Nebo
   1953, Photorevised 1970

   32
   Barstow
   1971, revised 1993
- 33 Mud Hills Prov. 1988
- 34 Water Valley Prov. 1988
  35 Lockhart Prov. 1986
  36 The Buttes Prov. 1986
- 37
   Saddleback Mtn.
   1973

   38
   Boron
   1973
- 39 North Edwards 197340 California City South 1973
- 41 Sanborn 1973, photoinspected 1980